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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/699,780	11/04/2003	Sue Feng	5725.0895-02	5902	
22852 7590 10/09/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER		
			VENKAT, JYOTHSNA A		
			ART UNIT	PAPER NUMBER	
	,	1615			
			MAIL DATE	DELIVERY MODE	
		10/09/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
		10/699,780	FENG ET AL.		
	Office Action Summary	Examiner	Art Unit		
		JYOTHSNA A. VENKAT Ph. D	1615		
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address		
A SH WHIC - External - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING DOTAINS OF T	ATE OF THIS COMMUNICATIO 136(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).		
Status					
2a)□	Responsive to communication(s) filed on <u>09 Jo</u> This action is FINAL . 2b) This Since this application is in condition for alloward closed in accordance with the practice under E	s action is non-final. nce except for formal matters, pr			
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 96-98,101,123,135,142,167,170,175,4a) Of the above claim(s) is/are withdrated claim(s) is/are allowed. Claim(s) 96-98,101,123,135,142,167,170,175,175,175,175,175,175,175,175,175,175	wn from consideration. ,192,194 and 203-206 is/are reje			
Applicati	ion Papers				
9) 10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	cepted or b) objected to by the drawing(s) be held in abeyance. Settion is required if the drawing(s) is ob	ee 37 CFR 1.85(a). pjected to. See 37 CFR 1.121(d).		
Priority (ınder 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
2) 🔲 Notic 3) 🔯 Infor	tt(s) De of References Cited (PTO-892) De of Draftsperson's Patent Drawing Review (PTO-948) De of Disclosure Statement(s) (PTO/SB/08) De r No(s)/Mail Date 7/9/07.	4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal 6) Other:	oate		

DETAILED ACTION

Receipt is acknowledged of remarks and IDS filed on 7/9/07. Claims 96-98, 101,123, 135, 142, 167,170, 175, 192, 194, and 203-206 are pending in the application and the status of the application is as follows:

Information Disclosure Statement

The foreign patents that have abstracts have been crossed out since applicants cited the abstracts under the NPL section and the examiner considered the abstracts only.

Claim Rejections - 35 USC § 112

Claims 95, 97, 98, 101, 123, 135, 142, 167,170, 175, 192, 194, and 203, and 205-206 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for providing intense color using the specific polymer (species) of claim 204, does not reasonably provide enablement for providing intense color using (i) at least one heteropolymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom or one heteropolymer is chosen from polyamide polymers of formula (I); The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is " undue". See In re Wands, 858 F.2d 731, 737, 8 USPQ 2d 1400, 1404 (Fed. Cir. 1998). The court set forth the eight factors to consider when assessing if a disclosure would require undue experimentation. Citing Ex parte Forman, 230 USPQ 546, the court recited eight factors

These factors include, but are not limited to:

- 1) The breadth of the claims,
- 2) The nature of the invention,
- 3) The state of the prior art,
- 4) The level of one of ordinary skill,
- 5) The level of predictability in the art,
- 6) The amount of direction provided by the inventor,
- 7) The existence of working examples
- 8) The quantity of experimentation needed to male or use the invention based on the content of the disclosure.
- (1 and 2) <u>The breadth of the claims and the nature of the invention</u>: The claims are drawn to:

Claim 96 (Previously presented): A method of providing intense color to a composition chosen from one or more of mascara, an eyeliner, a foundation, a lipstick, a blusher, a make-up removing product, a make-up product for the body, an eyeshadow, a face powder, a concealer, a shampoo, a conditioner, an anti-sun product, a care product for skin, a care product for lips, and a care product for hair comprising including in said composition:

- (i) at least one heteropolymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and
 - (ii) at least one coloring agent,

wherein said at least one heteropolymer is included in said composition in an amount effective to provide said intense color.

Claim 123 (Original): The method according to claim 96, wherein said at least one heteropolymer is chosen from polyamide polymers of formula (I):

in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R¹, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R^2 , which are identical or different, are each chosen from C_4 to C_{42} hydrocarbon-based groups with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon-based groups;
- R³, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R³ comprises at least 2 carbon atoms; and
- R⁴, which are identical or different, are each chosen from hydrogen atoms, C₁ to C₁₀ alkyl groups and direct bonds to at least one group chosen from R³ and another R⁴ such

that when said at least one group is chosen from another R⁴, the nitrogen atom to which both R³ and R⁴ are bonded forms part of a heterocyclic structure defined in part by R⁴-N-R³, with the proviso that at least 50% of all R⁴ are chosen from hydrogen atoms.

copolymer.

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Claim 205 (Previously presented): The method according to claim 203, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate

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(6-7) The amount of direction provided by the inventors and the existence of working examples: Applicants have provided in the specification one tables which shows method providing color using one species belonging to formula I. See below for test results.

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[00125] EXAMPLES.

[00126] The following compositions were prepared and their gloss and color were evaluated.

INCI Name	Inventive Composition	Comparative Composition
A .	·	,
Preservative	1.40	1.40
Film Formers	7.40	7.40
Thickening agent	0.10	0.10
Humectant	2.00	2.00
Triethanolamine	1.50	1.50
Anti-foam agent	0.10	0.10
3		
Waxes	10.75	17.02
Glyceryl Stearate	4.00	4.00
Stearic acid	3.00	3.00
Ethylenediamine/ Tall oil dimer acid/ Stearyl alcohol copolymer	6.27	····
Black Pigment	6.00	6.00
С		
Dimethicone copolyol	0.30	0.30
Cyclopentasiloxane	2.00	2.00
Cyclopentasiloxane/ Dimethiconol	3.00	3.00
Fillers	3.00	3.00
Conditioning agents	0.70	0.70

[00127] The components of phase A, except for the pigment, were blended together in water and the mixture was heated to a temperature ranging from 90°C to 95°C. Once

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the waxes had melted, the pigment was dispersed into the mixture with stirring. Separately, the components of phase B were blended together in water and the mixture was heated to a temperature ranging from 95°C to 100°C. The two mixtures where then combined with agitation and the combination was homogenized. The combined mixture was then cooled to a temperature ranging from 60°C to 65°C, and the components of phase C were added.

[00128] The gloss and the color of the inventive composition comprising at least one heteroatom (ethylenediamine/tall oil dimer acid/stearyl alcohol copolymer) and the comparative composition were evaluated and compared as follows. The gloss and the color of each of the compositions were visually evaluated by spreading a similar amount of each composition onto a piece of white paper. The color of the inventive composition was observed to be much more intense than the color of the comparative composition. Further, the inventive composition was observed to be much glossier than the comparative composition indicating greater dispersion of the pigment in the inventive composition.

Only one species was tested.

(8) The quantity of experimentation needed to make or use the invention bases on the content of the disclosure: The claims recite hetero polymer comprising polymer skeleton. This includes myriad of polymers. The same is true for polymers of formula I. The instant specification gives one skilled in the art no indication that the one could use the any polymer of claim 96 or all the polymers of formula I and have a reasonable expectation of success suing the polymer and coloring agent only. Therefore further

testing would be necessary to use the claimed invention and the practice of the full scope of the invention would require undue experimentation.

Response to Arguments

Applicant's arguments filed 7/9/07 have been fully considered but they are not persuasive.

Applicants argues that the specification provides general ranges for the various components of the inventive compositions and other such details that enable the invention, in addition to the example contained therein at pages 19, 21 and as understood by a person of ordinary skill and explained in the specification at page 19, the intensity of the color is measured by the L value, where an increase in intensity of color results in a proportional decrease in the L thus, one of ordinary skill would be enabled to practice the full scope of the claimed invention without undue experimentation and the mere fact that the specification includes testing for one species is in and of itself irrelevant to Office's erroneous conclusion of non-enablement. Rather, the courts have held that the specification need not contain any examples if the invention is otherwise disclosed in such manner that one skilled in the art will be able to practice it without an undue amount of experimentation.

In response to the above argument the specification at page 19 teaches:

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agent. Dispersion of the at least one coloring agent can be evaluated by at least the following methods. First, the at least one coloring agent is "dispersed," as used herein. if, when a sample of the composition comprising the at least one coloring agent is placed between 2 microscope slides, there are no agglomerates visible to the naked eye. Agglomeration is a well known phenomenon in the art, thus one of ordinary skill in the art should be able to readily determine whether the at least one coloring agent is present in the composition in the form of agglomerates. A second possible test is the determination of the development of color. It is well known that as the dispersion of the at least one coloring agent increases so too does the intensity of the visible color of the composition. Thus, L values of the composition can be measured (for example, using Minolta Chroma Meter CR-300) to determine the intensity of the color. In the cosmetic arts, and as defined in the L, a, b colorimetric notations system of the Commission Internationale de l'Eclairage, L defines the intensity of the shade. See U.S. Patent No. 6,010,541, Col 1, line 66 to Col. 2, line 8, and Col. 9, lines 15 - 57. The shade is proportionally more intense the lower the value of L (0 = black, 100 = white). Thus, at least one coloring agent is dispersed if there is an increase in intensity of color, i.e., a decrease in the L value. Furthermore, as used herein, "intense color" refers to compositions having a more intense color, i.e., lower L value, than the same composition without an effective amount of the at least one heteropolymer.

Specification teaches that L values can be measured to determine the intensity of the color and directs one skilled in the art to look to U. S. patent 6,010,541 ('541), col.1, ll 66 to col.2, line 8 and col.9, ll 15-57. See below for the discussion with respect to patent '541 at col.1 and col.2.

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For the purposes of the present invention, the chromaticity (luminosity) is defined by the value c* in the L*, a*,

b* colorimetric notation system of the Commission Internationale de l'Eclairage (C.I.E.) This value is equal to the square route of the sum a²+b² (+a is red, -a is green, +b is yellow, -b is blue). The shade is proportionately more luminous the greater the value of c*.

In this notation system, L* defines the intensity of the shade. The shade is proportionately more intense the lower the value of L* (0=black, 100=white).

See below for teaching of the patent at col.9, ll 15-57.

EXAMPLE 1

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The following dye composition, in accordance with the invention, was prepared:

NATROSOL PLUS GRADE 330 CS (Aqualon) Oleic acid Aqueous sodium bisulphite solution containing		1.0 3.0 0.45	_	20
35% AM* Para-phenylenediamine Resorcinol Aqueous amnmonia (20% NH ₃)		0.162 0.165 11.5	g	
Sequestering agent Water	q.s q.s.p	100		25

 $AM^* = active material$

At the time of use, this composition was mixed weight for weight with a 20-volumes aqueous hydrogen peroxide solution and the mixture obtained was then applied to locks of permanent-waved hair containing 90% white hairs. After leaving to stand on the locks for 30 minutes, they were rinsed and then washed with a shampoo, rinsed again and then dried.

Using an I.C.S. spectrocolorimeter, the value L* in the L*,

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a*, b* international colour notation system from C.I.E. was measured.

The result was as follows: $L^*=32.19$

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COMPARATIVE EXAMPLE 2

Example 1 was repeated, replacing 1 gram of nonionic amphiphilic polymer (Natrosol Plus Grade 330 CS) by the mixture of the following two nonionic surfactants (allowing 45 the same viscosity to be obtained):

24 grams of decyl alcohol (C₁₀-C₁₂-C₁₄/85-8.5-6.5) oxyethylenated with 3.5 mol of ethylene oxide, sold under the name Mergital BL 309 by the company Henkel, and

16 grams of decyl alcohol (C_{10} - C_{12} - C_{14} /85-8.5-6.5) oxy- 50 ethylenated with 5.5 mol of ethylene oxide, sold under the name Mergital BL 589 by the company Henkel.

The same procedure as in Example 1 was then followed.

The result was as follows: $L^*=35.72$

Conclusion: the shade obtained according to the invention 55 is more intense (lower L*) than that obtained according to the prior art.

From the above discussion of the patent, inventive composition which had L* value of 32.19 had more intense shade than the comparative composition which had L* value of 35.72. The instant specification at page 39 states that the inventive composition had L* value 28.39 and the comparative composition has L* value 29.99 and based upon the lower L* value, the inventive composition is more intense in color. It is not clear to the examiner results with respect to L* since in patent '541, L* value of 32.19 is more intense in shade, where as in the instant specification comparative composition having value of 29.99 is not intense in color. Additionally

only one copolymer exhibited the functional language recited in the claims, which is "method of providing intense color". The copolymer is species belonging to formula I recited in claim 123. What is the structure of this copolymer and how does this correspond to formula I? Claim 96 recites that the polymer is "(i) at least one heteropolymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom". There are myriad of polymers and specification and it is an undue burden to determine L* value for each polymer and then compare it with composition which does not have this structured polymer. Additionally claims recite "composition chosen from one or more of mascara, an eveliner, a foundation, a lipstick, a blusher, a make-up removing product, a make-up product for the body, an eye shadow, a face powder, a concealer, a shampoo, a conditioner, an anti-sun product, a care product for skin, a care product for lips, and a care product for hair" and the specification is silent to the nature of the composition. Example tested for L* value did not have "polysaccharide resin", which is claimed in claim 167. There are no colorants other than black pigment. How can this composition be used for a foundation, lipstick, blusher, makeup product for the body, a care product for lips? In order to be an anti-sun product the compostions should have sunscreen agents. There is no sunscreen agent present in the example tested for intense color. The expression "care product for the hair" can be for hair setting composition, hair bleaching composition, hair coloring composition, permanent waving composition, hair straightening composition, hair styling composition, hair mousse composition, hair spray composition? Depending on the nature of the hair care product the ingredients are different and the instant specification did not show L* value for each composition using the species let alone for the polymer. It is an undue experimentation to determine L* value for

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each polymer and combining each polymer with ingredients that are suitable for different cosmetic products.

The art rejections are applied due to the reasons stated below:

Specification at page 19 teaches that "intense color refers to compositions having a more intense color, i.e., lower L value, than the same composition without an effective amount of the at least one heteropolymer". Therfore it is the position of the examiner that patents which have heteropolymer and pigment exhibit intense color since the PTO is not equipped to measure the L* value using Minolta Chroma Meter CR-300).

The effective filing date of the instant application is 10/5/01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 96-98, 101, 123, 135, 175, and 203 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent 3,148,125('125).

See examples at col.3. Polyamide resin reads on heteropolymer or polymer of formula I. lanolin alcohol reads on the fatty alcohol. Examples have pigment and the composition exhibits intense color absence of evidence to the contrary.

Claims 96-98, 101, 123, 135, 175, and 203 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent 5,500,209('209)

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See examples I-III and X. Versamid reads on heteropolymer or polymer of formula I. oleyl alcohol reads on the fatty alcohol. Examples have color and the composition exhibits intense color absence of evidence to the contrary.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 96-98, 101, 123, 135, 175, and 203 are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent 6,423,324('324).

See examples. Polyamide resin reads on heteropolymer or polymer of formula I. Octyl decanol reads on the fatty alcohol. Examples have dyes and the composition exhibits intense color absence of evidence to the contrary.

Claims 96-98, 101, 123, 135, 170,175, and 203 are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent 6,497,861('861).

See examples. Polyamide resin reads on heteropolymer or polymer of formula I. Isocetyl alcohol in lipstick reads on the fatty alcohol. Polyvinyl pyrrolidone in mascara formulation reads on film former. Examples have dyes and pigments and black iron oxide and the compositions exhibit intense color absence of evidence to the contrary.

Claims 96-98.101, 123, 135, 192, 194, and 203-206 rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent 6,402,408('408)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

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inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

See examples 1-2. Uniclear reads on the claimed heteropolymer and also the species. Compositions have pigments and the claimed method is inherent absence of evidence to the contrary.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 96-98,101, 123, 135, 142, 170, 192,194 and 203-206 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of U.S. Patent No. 6,716,420('420). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent is claiming method of

making mascara using the species and the composition has the polymer and film former and it also has colorants and thus the compostions exhibit intense color. With respect to claim 206 it would be obvious to prepare the compostions and use it for nail, since nail compositions also use colorants and film formers.

Claims 96-98,101, 123, 135, 142, 170, 192,194 and 203-206 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 7,008,619 ('619). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent is claiming method of making mascara using the species and the composition has film former and it also has colorants and thus the compostions exhibit intense color. With respect to claim 206 it would be obvious to prepare the compositions and use it for nail, since nail compositions also use colorants and film formers.

Applicanst are also notified that there is obviousness-type double patenting between the instant application and the following patents since the patents claim either composition and /or method using the same polymer of formula I or species and using in various cosmetic compostions, which has colorants and therefore the compostions also exhibit intense color claimed in the instant application. The patents are:

6,402,408

6,835,399

6,869,594

6,881,400

6,960,339

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6,979,469

7,008,629

7,011,823

7,144,582

6,432,391

7,025,953

7,052,681

7,023,552

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTHSNA A. VENKAT Ph. D whose telephone number is 571-272-0607. The examiner can normally be reached on Monday-Friday, 10:30-7:30:1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JYOTHSNA A VENKAT Ph.

Primary Examiner Art Unit 1615
